

## Recombinant Human HADH, His-tagged

Cat. No. HADH-2032H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human HADH protein was expressed in <i>E.coli</i> and purified by using conventional chromatography techniques. MW=35.1 kDa (323aa).
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	HADH, which belongs to the family of oxidoreductases, is important for converting certain fats to energy. This protein is an enzyme that catalyzes the chemical reaction. ((S)-3-hydroxyacyl-CoA + NAD <sup>+</sup> ⇌ 3-oxoacyl-CoA + NADH + H <sup>+</sup> ). It is also involved in a process called fatty acid oxidation, in which several enzymes work in a step-wise fashion to break down (metabolize) fats and convert them to energy.
<b>Sequences Of Amino Acids</b>	MGSSHHHHHH SSGLVPRGSH MSSSSTASAS AKKIIVKHVT VIGGGLMGAG IAQVAAATGH TVVLVDQTED ILAKSKKGIE ESLRKVAKKK FAENPKAGDE FVEKTLSTIA TSTDAASVVH STDLVVEAIV ENLKVKNELF KRLDKFAAEH TIFASNTSSL QITSIANATT RQDRFAGLHF FNPVPMKLV EVIKTPMITSQ KTFESLVDFS KALGKHPVSC KDTPGFIVNR LLVPYLMEAI RLYERGDASK EDIDTAMKLG AGYPMGPFEL LDYVGLDTTK FIVDGWHEMD AENPLHQPS SLNKLVAENK FGKKTGEGFY KYK.
<b>Purity</b>	> 95% by SDS-PAGE.
<b>Concentration</b>	1.0 mg/ml (determined by Bradford assay).

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<b>Form</b>	Liquid. 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol,0.1M NaCl.
<b>Storage</b>	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	HADH hydroxyacyl-Coenzyme A dehydrogenase [ Homo sapiens ]
<b>Synonyms</b>	HADH; hydroxyacyl-Coenzyme A dehydrogenase; HAD; HHF4; HADH1; SCHAD; HADHSC; M/SCHAD; MGC8392; HADH; hydroxyacyl-coenzyme A dehydrogenase, mitochondrial; HCDH; short-chain 3-hydroxyacyl-CoA dehydrogenase; L-3-hydroxyacyl-Coenzyme A dehydrogenase, short chain; medium and short-chain L-3-hydroxyacyl-coenzyme A dehydrogenase; Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial; HCDH; EC 1.1.1.35; Medium and short-chain L-3-hydroxyacyl-coenzyme A dehydrogenase; Short chain 3-hydroxyacyl-CoA dehydrogenase; L-3-hydroxyacyl-Coenzyme A dehydrogenase
<b>Gene ID</b>	3303
<b>mRNA Refseq</b>	NM_005327
<b>Protein Refseq</b>	NP_005318
<b>MIM</b>	601609
<b>UniProt ID</b>	Q16836
<b>Chromosome Location</b>	4q22-q26

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**Pathway**

Butanoate metabolism; Fatty acid elongation in mitochondria; Fatty acid metabolism; Lysine degradation; Metabolic pathways; Tryptophan metabolism; Valine, leucine and isoleucine degradation


**Function**

3-hydroxyacyl-CoA dehydrogenase activity; binding; coenzyme binding; oxidoreductase activity

**PDB rendering based on 3had.**

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